

Shamak Dutta

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GitHub/shamak • LinkedIn/shamakdutta • DevPost/shamak

<https://shamak.github.io/>

Technical Skills

Languages: Python > Java > Ruby > C++

Tools: Elasticsearch, Apache Pig, Hadoop, TensorFlow, Theano, scikit-learn, Julia

Research & Work Experience

Research Assistant, Deep Learning for Motion Analysis

Supervisor: Dana Kulić, Adaptive Systems Lab, University of Waterloo

Waterloo, ON

May 2016 - present

Research Assistant, Applied Combinatorial Optimization

Supervisor: Stephen Smith, University of Waterloo

Waterloo, ON

May 2016 - present

A9

Software Engineer, Advertising Technology

Palo Alto, CA

January 2016 - April 2016

- Hacked on Elasticsearch, a distributed, open-source search engine, to return ~1 million field values in 100 milliseconds on a search query, 200x improvement from default implementation

Research Assistant, Deep Learning & Neural Networks

Supervisor: H.R Tizhoosh, University of Waterloo

Waterloo, ON

September 2015 - December 2015

- Co-authored a publication on deep autoencoders for image search & retrieval
- Investigated improving deep learning training algorithms using opposites of images

Lookout

Software Engineer, Security & Infrastructure

San Francisco, CA

May 2015 - August 2015

- Co-developed a search parser to convert natural text to an Elasticsearch search query
- Won a hackathon by developing a scoring algorithm to gamify code reviews with leaderboards: processed thousands of code reviews & displayed various insightful metrics
- Built multiple features into the internal security analysis platform used by research teams

Avvasi

Software Engineer, Platform

Waterloo, ON

September 2014 - December 2014

- Built & shipped a network testing framework for high performance computer blades with a heavy emphasis on concurrency and performance, ultimately automating production workflow
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Projects

- Search & recommendation engine on **PianoShelf**, an online forum for pianists to browse & explore sheetmusic, for ~10,000 users with ~3000 sheet music
 - **Mobile application** organising carpool rides amongst students; Winner at hackWaterloo
 - **Mobile application** simplifying event scheduling between friends, built at HackTheNorth
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Education

University of Waterloo

Candidate for Bachelors of Computer Engineering

Waterloo, ON

September 2012 - Present